



City of Ryde

Crash Analysis Report

Ryde LGA

2002-2006

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February 2008

PART 1

Introduction

The City of Ryde is committed to making its roads a safe environment to be. Better understanding of road safety issues and solutions is important in achieving our goal.

In the City of Ryde there are a number of concerns when dealing with road safety. Promoting community-based action underlies the issues that will emerge from this crash analysis report, at the local level.

The Challenge

The City of Ryde commenced involvement with the NSW Local Government Road Safety Program in 1999 with the employment of a full-time Road Safety Officer. Since 2004, the Road Safety Officer position has moved from Engineering to Community Services and the position has been renamed to Road and Community Safety. The challenge is to address the road safety issues within Ryde, in conjunction with community safety issues, by raising community awareness through enforcement, education and engineering efforts to make the roads a safer place to be.

Objectives of Action Plan

Road safety is an issue for all members of the Ryde community. The City of Ryde is committed to road safety and the Road Safety Action Plan will help to ensure our objectives are met. These objectives are stated in each road safety project initiative outlined in the Action Plan. They have been decided, based on the crash data evaluation of the City of Ryde. The activities of the Road Safety Action Plan aim to reduce the casualties on Ryde roads by educating the community and thereby changing driver and pedestrian behaviour.

The actions outlined in the Plan reflect both the commitment of the State Government and that of the City of Ryde.

PART 2

Ryde Demographic Data

The City of Ryde has an area of 40.651kms² and lies in the central northern part of the Sydney Metropolitan area, approximately 12kms from the centre of Sydney.

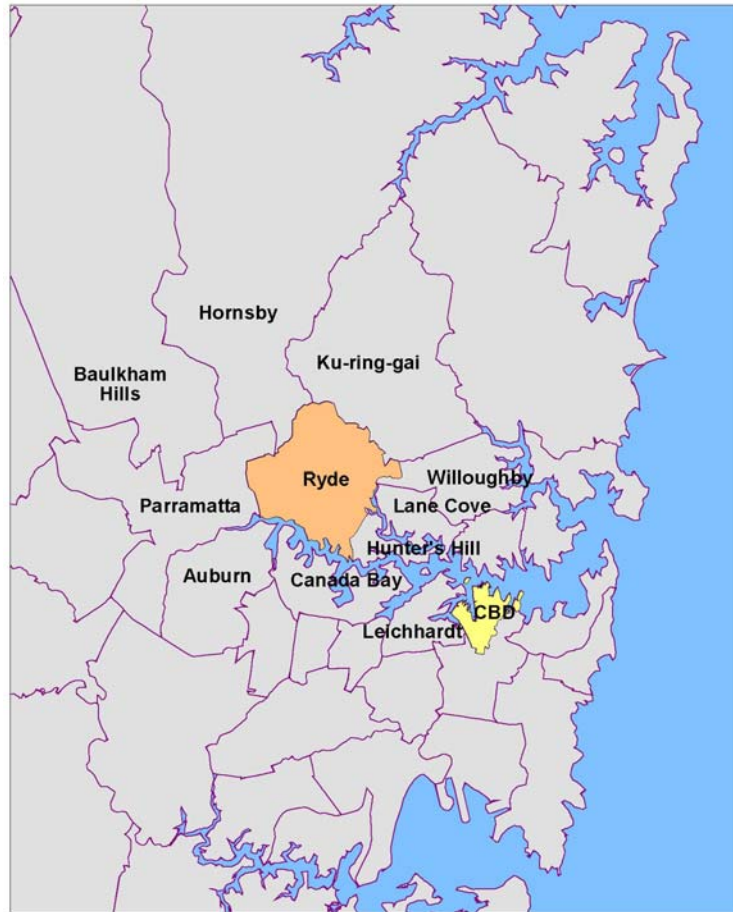


Figure 1: The location of the City of Ryde

The City occupies most of the divide between the Parramatta and Lane Cove rivers, and has 16 suburbs within its boundaries. The suburbs that make up the City of Ryde include Chatswood West, Denistone, Denistone East, Denistone West, East Ryde, Eastwood, Gladesville, Macquarie Park, Marsfield, Meadowbank, Melrose Park, North Ryde, Putney, Ryde, Tennyson Point, and West Ryde.

The traditional Aboriginal owners of the land are the Wallumedegal clan of the Dharug tribe. Aboriginal sites in the City are predominantly located around the foreshores of the Parramatta River and Lane Cove River.

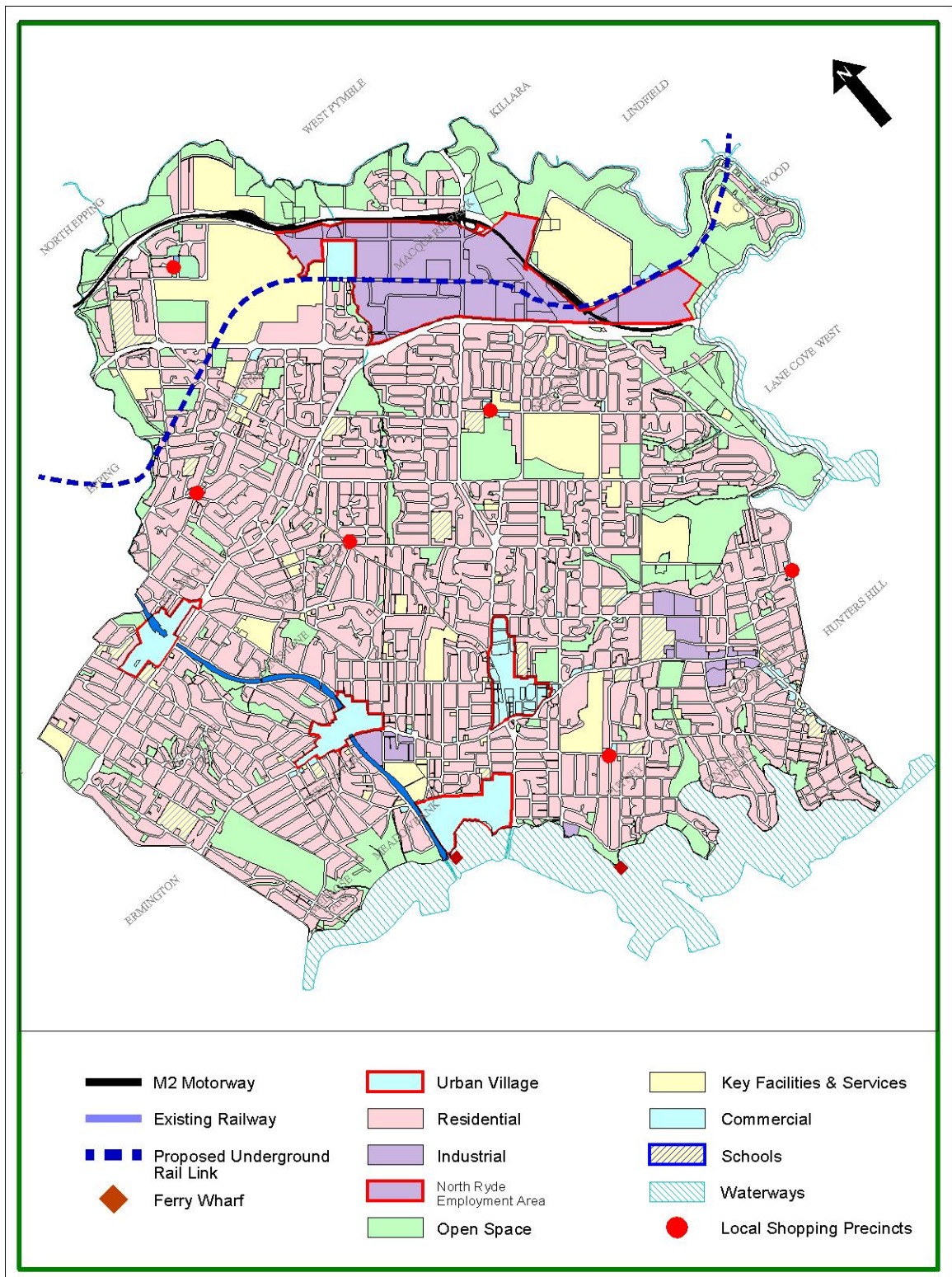


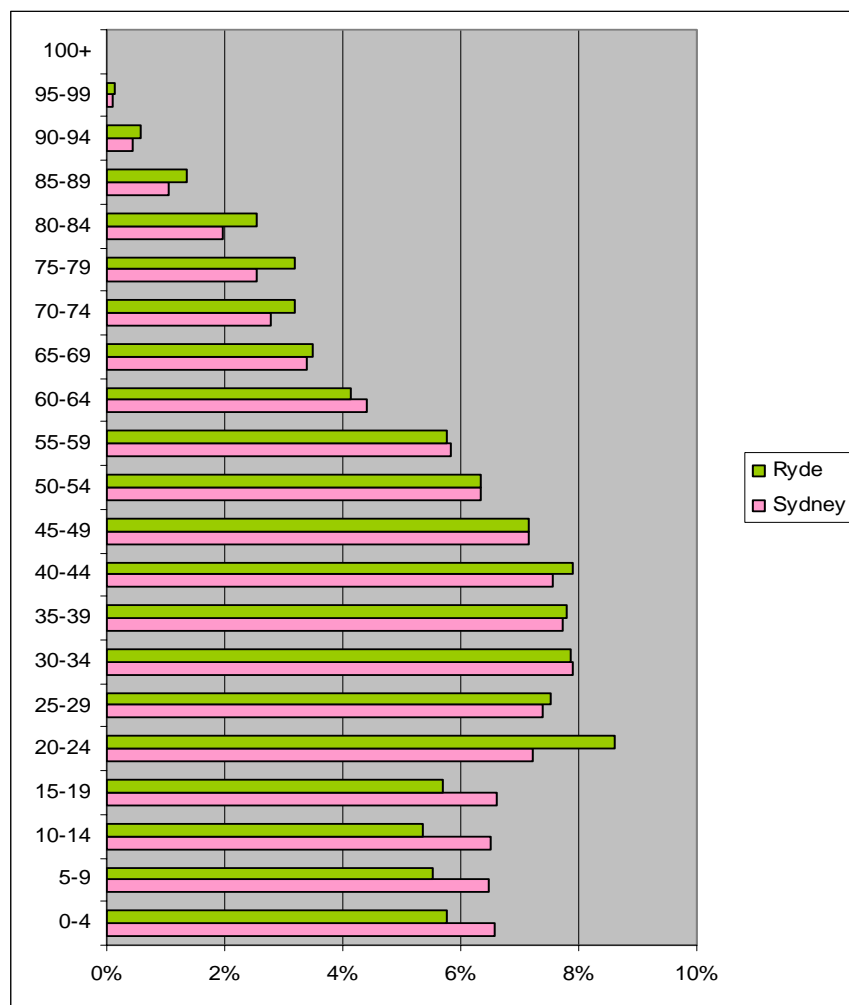
Figure 2: Structure Plan of the City of Ryde

The People

The residential population for the City of Ryde, as at the 2006 Census, was estimated at 96 948. The largest age group in the community is adults in their prime working age from 25–54 years who make up 45% of the population.

In the City in 2006, there were 46 778 males and 50 170 females.

The City's Aboriginal and Torres Strait Islander population in 2006 was 267 persons.

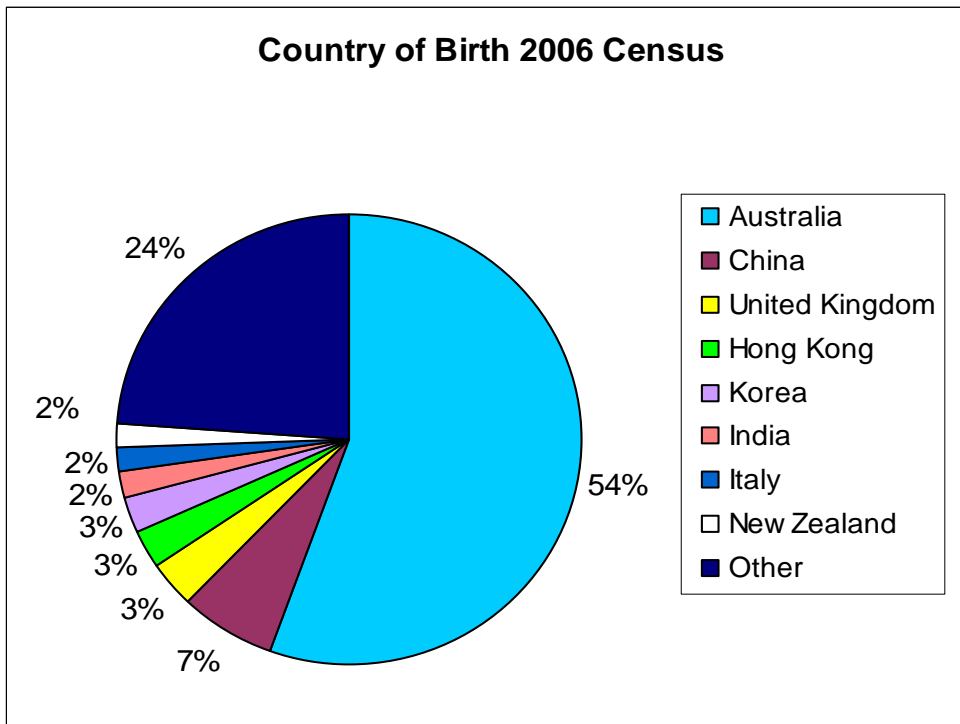


Graph 1: Relative size of age groups (ABS 2006 Census Population and Housing)

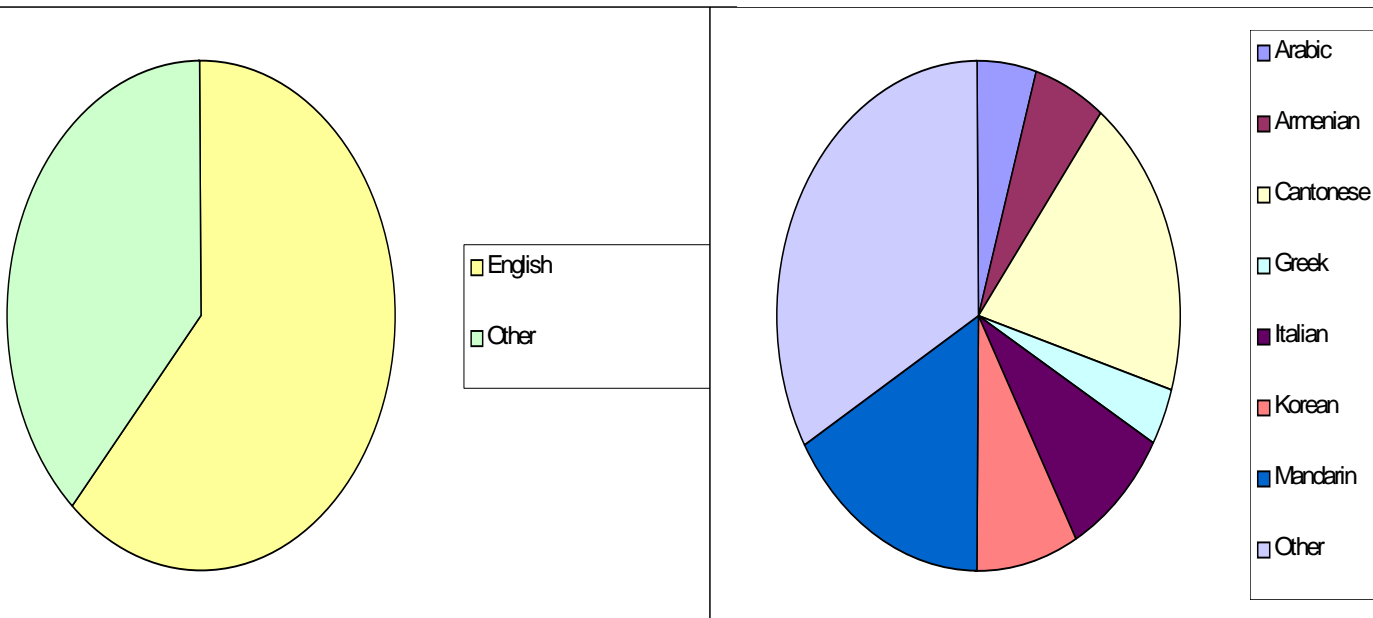
In 2006, some 62% of the City's people were born in Australia and 38% born overseas. The most common overseas birthplaces were China, U.K., Hong Kong and Korea.

People who spoke a language other than English at home made up 36% of the population. The most common of these languages were Cantonese, Mandarin, Italian, , Korean & Armenian.

Graph 2: Country of birth (ABS 2001 Census Population and Housing)



Graph 3: Language spoken at home (ABS 2001 Census Population and Housing)



(City of Ryde – City Vision 2022, Draft)

The Cars

Table A, identifies the number of Vehicles registered in Ryde LGA. The majority of the vehicles which are registered in Ryde LGA are passenger vehicles (73%) followed by light trucks (10%). There has been an increase in light trucks since 2006, whilst there has been a large decrease from 2006 to 2007 in the off-road passenger vehicles.

Table A: Number of vehicles registered in Ryde LGA as at 30 June 2006 and 2007

Passenger Vehicles	Off-road Passenger Vehicles	Small Buses	Buses	Mobile Homes	Motor-cycles	Light Trucks	Heavy Trucks	Prime Movers	Light Plant	Heavy Plant	Small Trailers	Trailers	Other Vehicles	Size of Vehicle Fleet
51568	8640	344	1366	42	1176	5863	371	18	73	25	3299	1034	5	73824
54674	6139	348	419	37	1301	6728	358	15	60	28	3259	1123	5	74494

Table B: Licence holders in Ryde by licence type as at 30 June 2006 and 2007

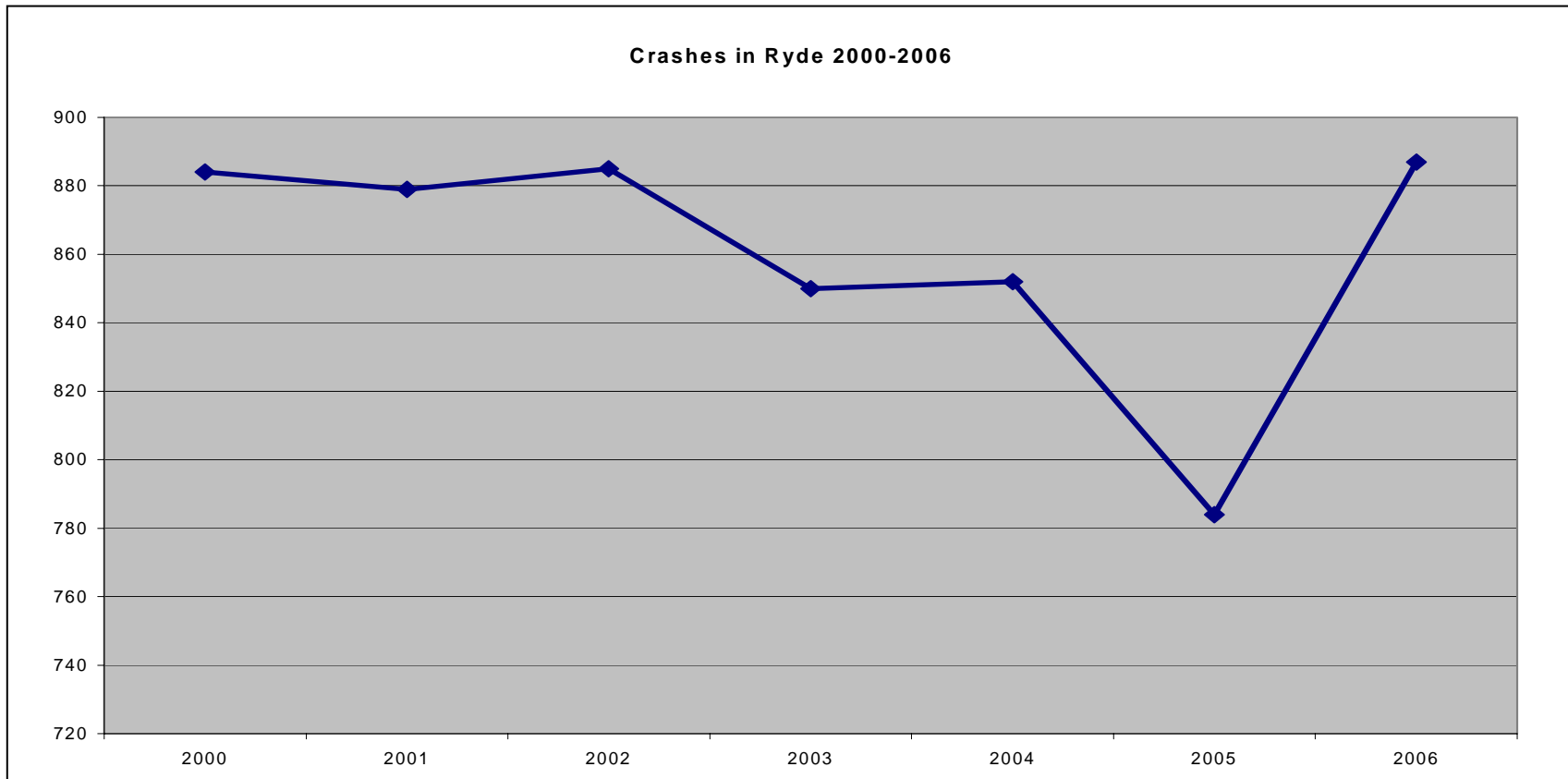
Learner	P1	P2	Unrestricted	Total
5874	2712	4050	76675	89311
4907	2343	3479	59769	70498

Table B shows the number of licence holders in Ryde by licence. There has been a large decrease in the number of licence holders.

PART 3

Ryde Crash Analysis 2000- 2006

The following information provides a statistical overview of the road crash data for Ryde LGA between 2000 and 2006. For definitions and explanatory notes please see Appendix 1.



Graph 4: Total Number of Crashes in Ryde 2000-2006

1. CRASHES

Table 1 and the graph 4 above identifies the total number of crashes in Ryde LGA by fatal/injury/non-casualty classification between 2002 and 2006. Although there was a significant decrease in the number of fatal crashes from 2005 to 2006, the overall trend shows that the total number of crashes is back on the rise. Between 2005 and 2006 there was an extra 103 crashes which is a drastic increase and change from the previous trend which was showing a decrease in total crashes.

Table 1. Ryde LGA number of crashes by fatal/injury/non-casualty classification 2002-2006

	2002	2003	2004	2005	2006	5 year Av.
Fatal Crashes	5	6	4	7	2	4.8
Injury Crashes	355	298	309	268	312	308.4
Non-casualty Crashes	525	546	539	509	573	538.4
Total Crashes	885	850	852	784	887	851.6

2. CASUALTIES

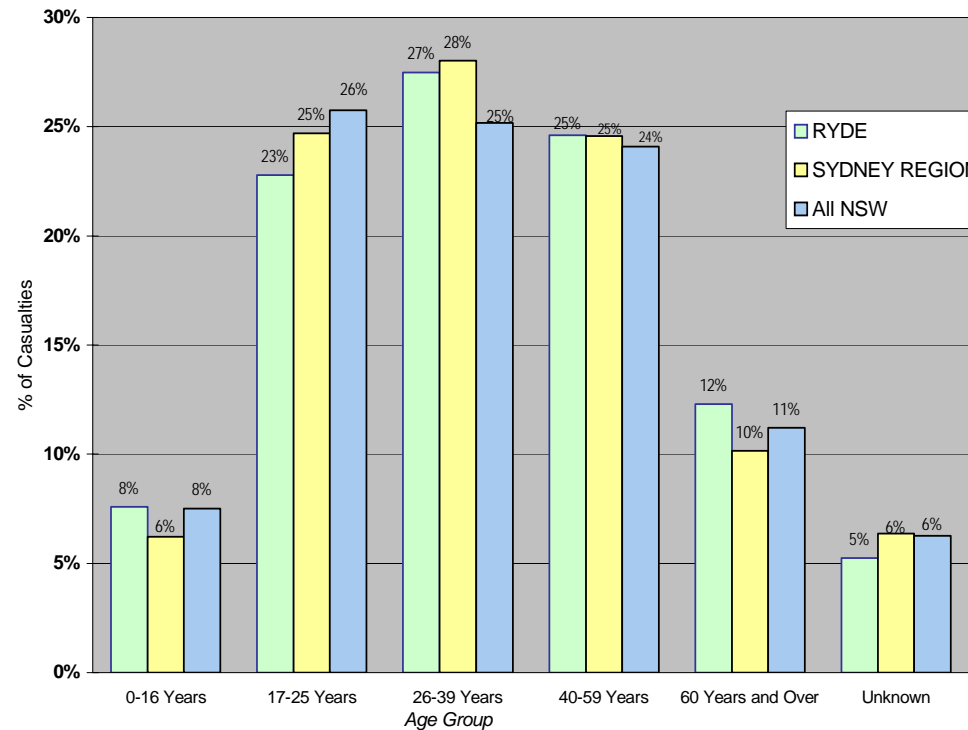
Table 2 shows the total number of casualties in Ryde LGA by killed/injured classification between 2002 and 2006. The total number of casualties killed for 2006 is at its lowest since before 2002, where only 2 casualties were killed. This is extremely positive and represents a small number, especially in comparison to 2003 and 2005 where a high of 7 casualties killed was recorded (-5 from 2006). The previous trend which showed a decline in the total number of casualties has now risen from 341 in 2005 to 382 in 2006 (+41) due to the increase in the number of injured casualties. This increase has not affected any of the 5 year averages in a negative way as all 3 have decreased.

Table 2. Ryde LGA number of casualties by killed/injured classification 2002-2006

	2002	2003	2004	2005	2006	5 yr Av.
Killed	6	7	4	7	2	5.2
Injured	419	373	355	334	380	372.2
Total	425	380	359	341	382	377.4

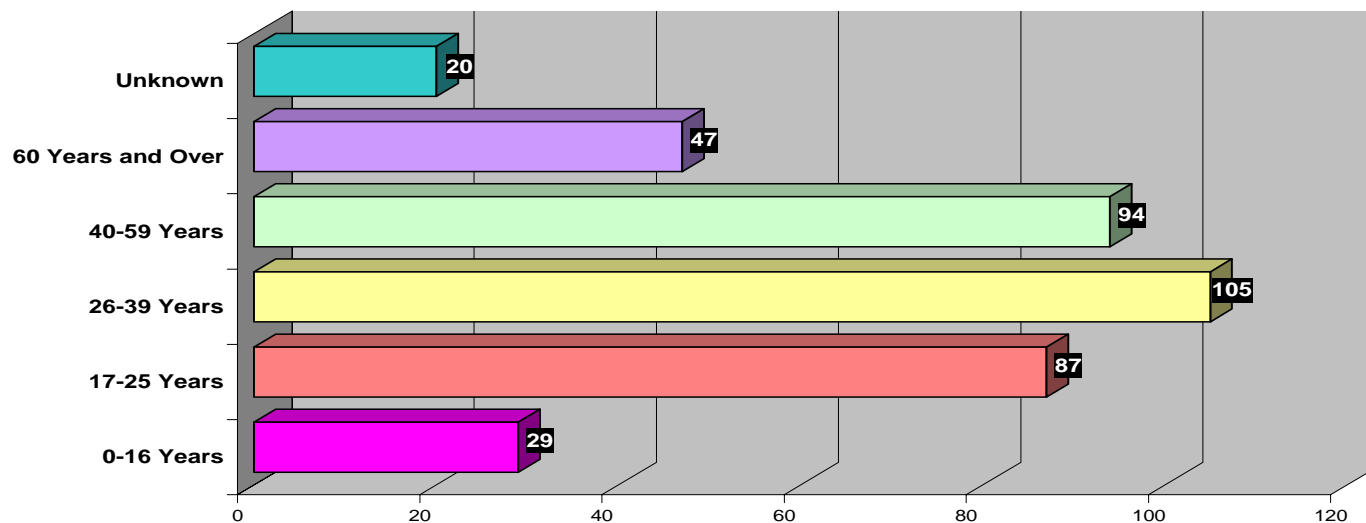
2a. Casualties by age group

Graph 5 shows the distribution of casualties by age group across Ryde LGA, Sydney and NSW for 2006. In previous years Ryde has had a slightly higher percentage in both the 26-39 and 40-59 year age group than NSW and Sydney, the percentage for both age groups in Ryde have decreased by 2% from 2005 to 2006. In 2006 Ryde had a slightly higher percentage of casualties than Sydney for the 0-16 age group and a higher percentage for Sydney and NSW for the 60 years and over age groups. Ryde continues to have a lower percentage of casualties in the 17-25 year age group.



Graph 5: Distribution of casualties by age group and region 2005

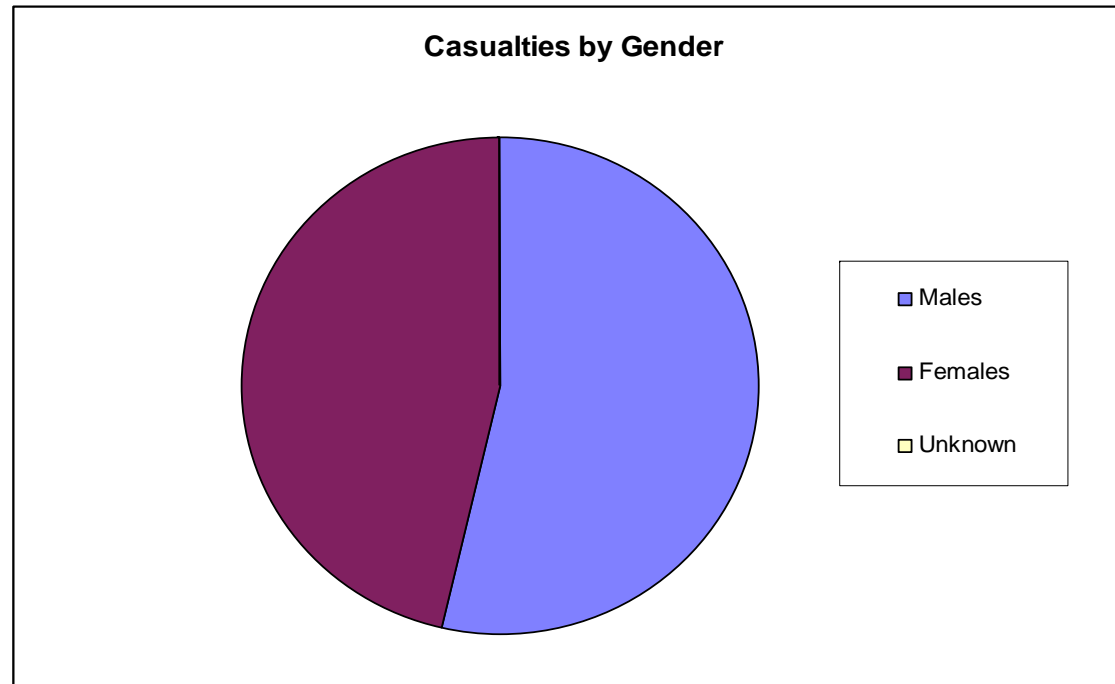
Graph 6 displays the number of casualties in Ryde by age group in 2006. As in 2005, the majority of casualties in Ryde in 2006 for motor vehicle controllers involved in all crashes occurred in the 26-39 year age group followed by the 40-59 year age group. It is important to note however that there is a smaller age gap in the 17-25 year group and this statistic remains relatively high.



Graph 6: Casualties in Ryde LGA by age group 2006

2b. Casualties by gender

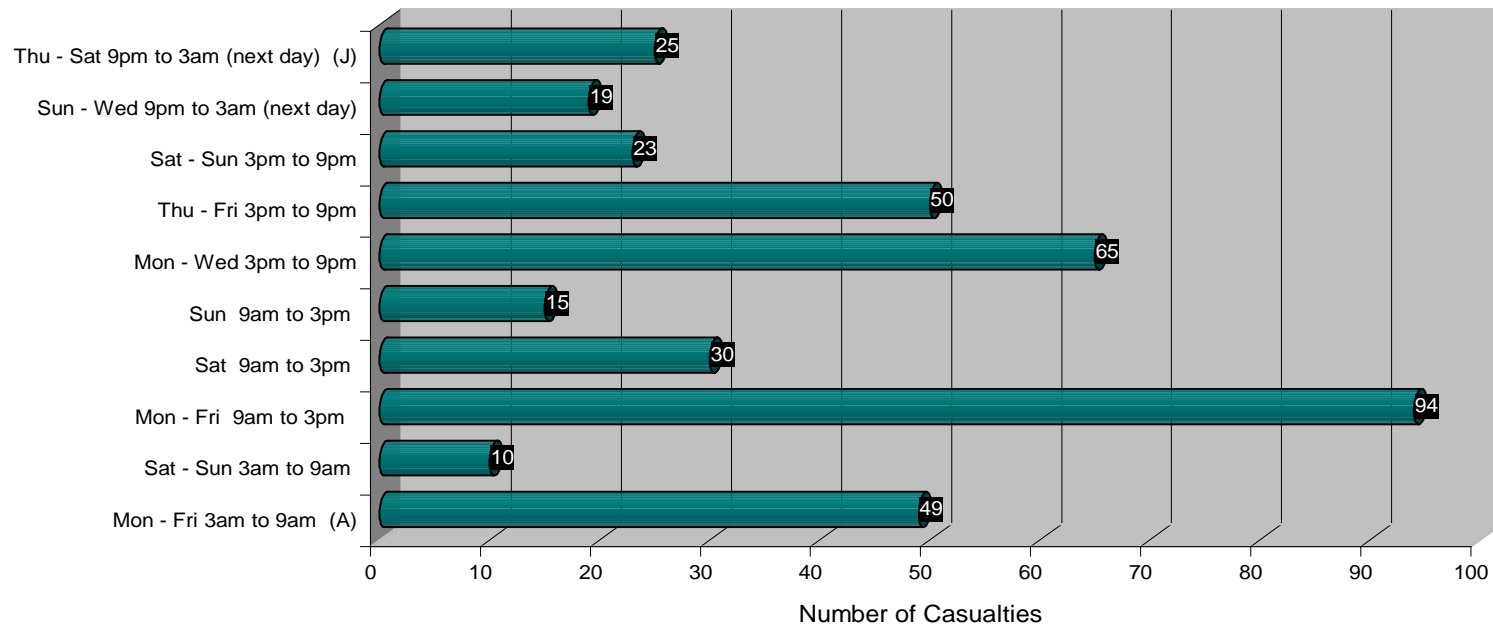
Table 1 showed that there were 382 casualties in the Ryde LGA, of the 382 casualties, 204 (53%) were males and 177 (46%) were females. This is interesting because in 2005, 49% of casualties were males and 50% were females, therefore the male casualties percentage has increased and the female casualties have decreased. The percentages for Ryde are now comparable with NSW and Sydney.



Graph 7 in Ryde LGA by gender 2006

2c. Casualties by time period

Graph 8 describes the number of casualties in Ryde by time periods, 2006. The greatest number of casualties occurred from Monday to Friday between 9am and 3pm.



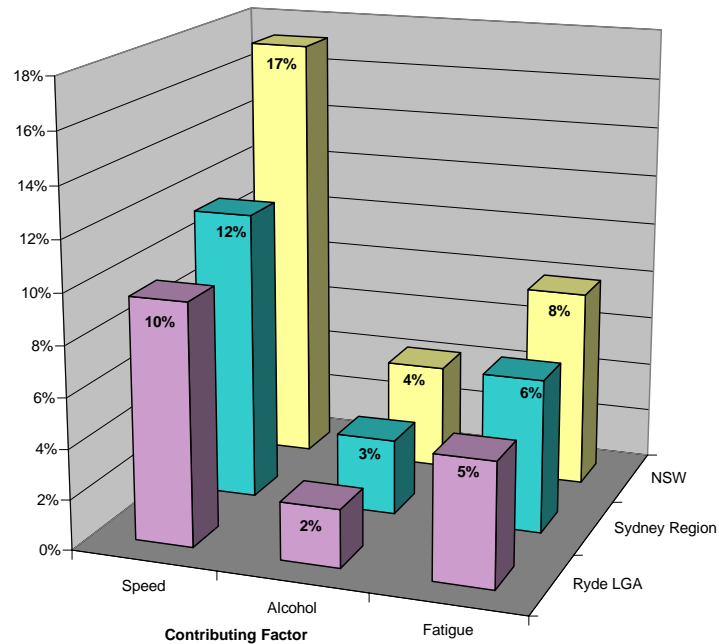
Graph 8: Number of casualties by time period in Ryde 2005

3. CONTRIBUTING FACTORS

This section discusses crash statistics in relation to contributing factors, notably speed, alcohol and fatigue.

3a. Comparisons by region

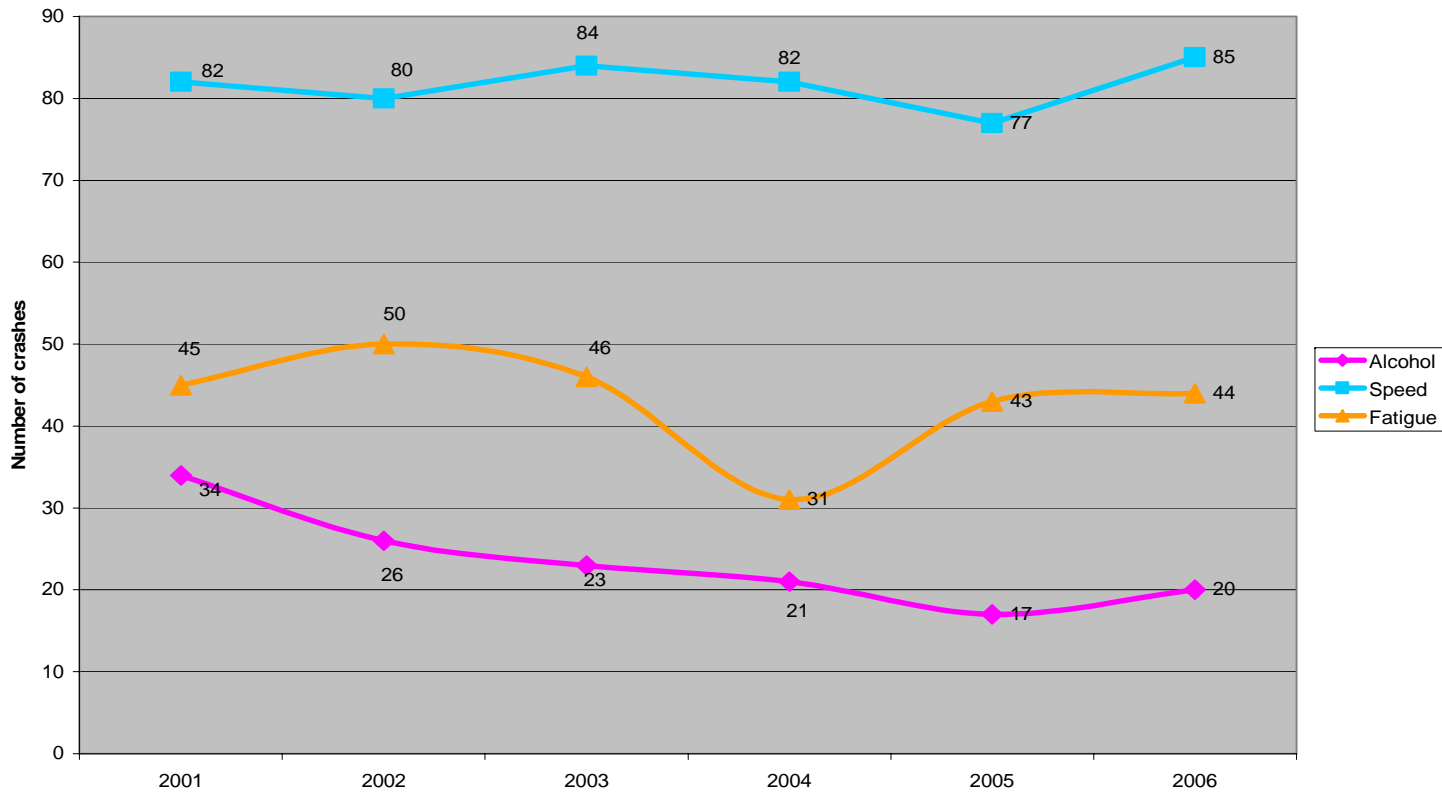
Graph 9 shows the percentage of all crashes in Ryde, Sydney region and NSW according to contributing factors in 2006. As can be seen, NSW has the highest percentage of crashes with speed involvement, 17% of all crashes in NSW involved speed. Speed is also the highest contributing factor for both Sydney with 12% and slightly less in Ryde with 10% of all crashes involving speed. In 2005 fatigue related crashes accounted for 6% of the total crashes in Ryde, in 2006 this percentage is at 5%. Alcohol has stayed the same at 2%. Ryde has the lowest percentage of crashes compared to NSW and Sydney across all contributing factors.



Graph 9: Crash percentage and contributing factors between Ryde, Sydney region and NSW 2006

3b. Comparisons within Ryde 2001-2005

Graph 10 looks at the percentage of crashes with contributing factors between 2001 and 2006 in Ryde and shows the large difference between the number of Speed, Fatigue and Alcohol crashes. As mentioned speed is the highest contributing factor to crashes in Ryde, followed by fatigue and alcohol, however all three contributing factors have increased somewhat, the biggest increase was in speed related crashes, which in the previous year (2005) had decreased.

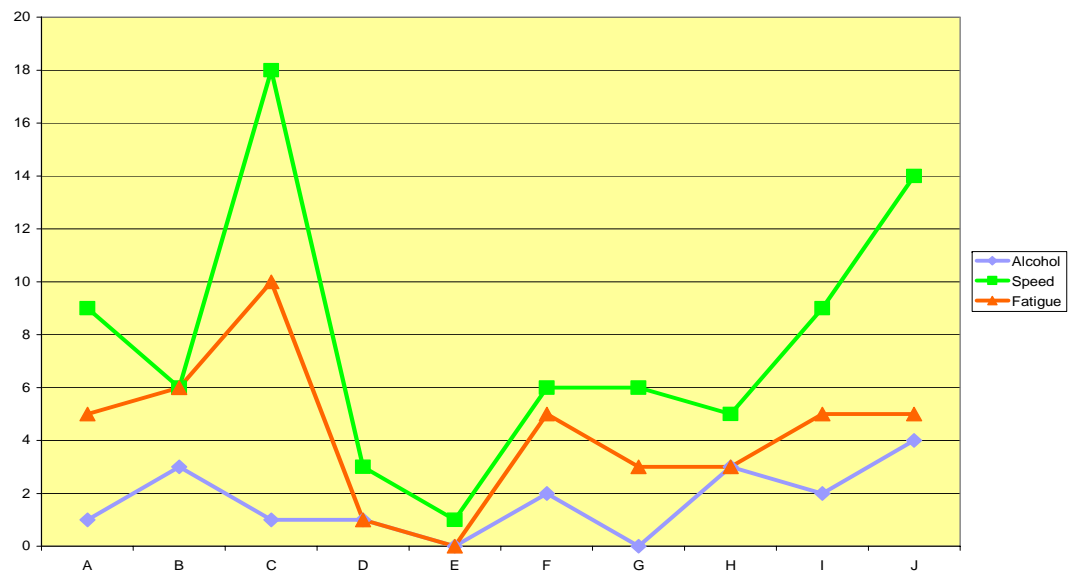


Graph 10: Number of all crashes according to contributing factors 2001-2006 Ryde

3c. Comparisons in Ryde by time period and contributing factor

McLean Time Periods

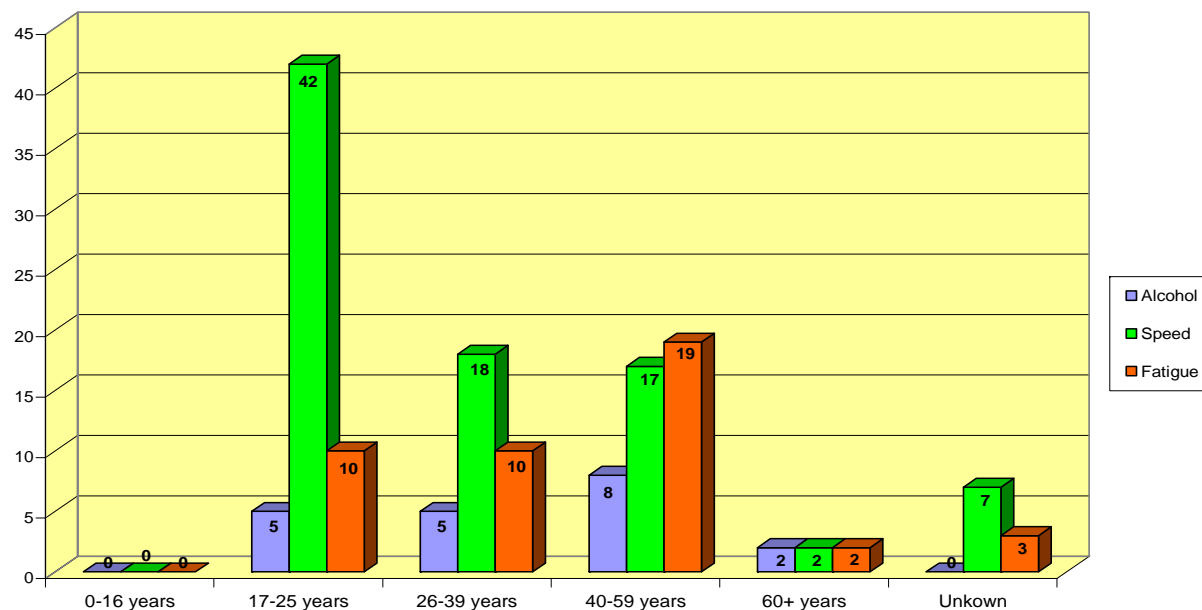
A	Monday – Friday 3am – 9am
B	Saturday – Sunday 3am – 9am
C	Monday – Friday 9am – 3pm
D	Saturday 9am – 3pm
E	Sunday 9am – 3pm
F	Monday – Wednesday 3pm – 9pm
G	Thursday – Friday 3pm – 9pm
H	Saturday – Sunday 3pm – 9pm
I	Sunday (pm) – Thursday (am) 9pm – 3am (the next day)
J	Thursday (pm) – Sunday (am) 9pm – 3am (the next day)



Graph 11: Fatal or injury crashes by contributing factor and time period Ryde 2005

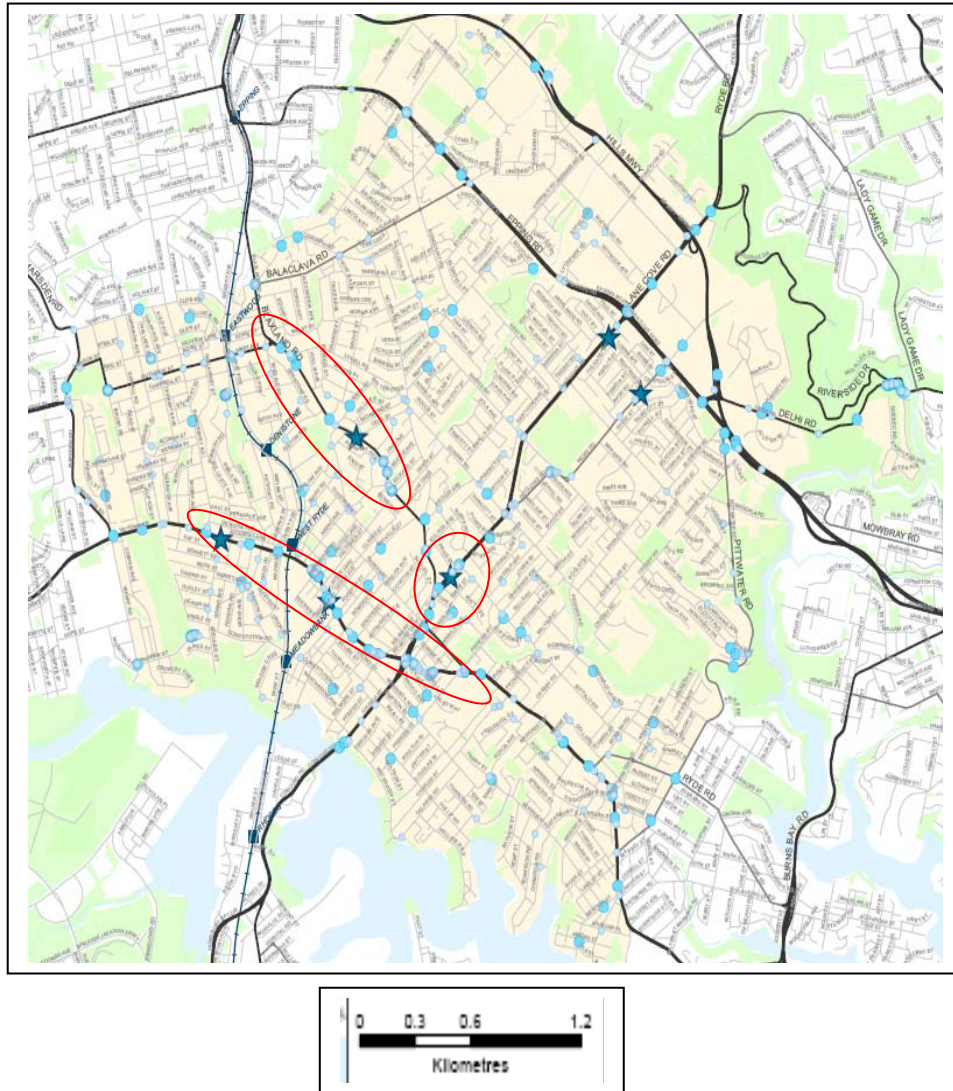
Graph 11 shows the fatal or injury crashes by contributing factor and time period in Ryde 2006. The time periods are specified in the table above according to McLean Time Periods.

Graph 12 shows the number of motor vehicle controllers involved in crashes in Ryde according to contributing factors and age group for 2006. The number of speed related crashes for the 17-25 year age group has increased in 2006 by 13 crashes, this increase further cements the 17-25 year age group as having the greatest number of motor vehicle controllers involved in speeding related crashes. The greatest number of motor vehicle controllers involved in fatigue related crashes and alcohol related crashes was aged between 40-59 years, who are far clear of the other age groups.



Graph 12: Number of motor vehicle controllers involved in crashes by contributing factor and age group Ryde 2005

3ci. Crashes involving speed



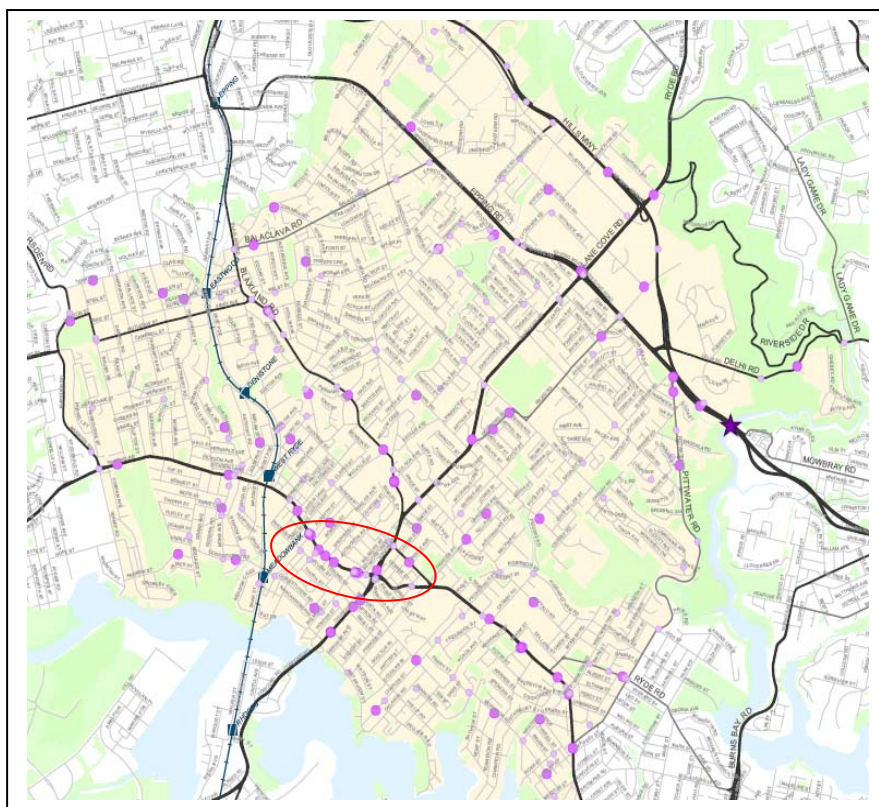
In 2006, there were 85 crashes involving speed in Ryde, 36 of which were injury crashes. There was 1 fatal crash involving speed. There were 38 speeding related casualties in Ryde in 2005, this number decreased by one to 37 in 2006. The majority of casualty crashes involving speed in 2006 occurred during the week, Monday to Friday between 9am and 3pm (see Graph 11). Speeding related crashes have been decreasing since 2003 when the total was 84, in 2006 the total has increased and is now the highest total number of speed related crashes (85) over the 5 year average. The 17-25 year age group had the highest number of speeding crashes by motor vehicle controller (42), whereby almost half, 48%, of all speeding related crashes involved 17-25 year old motor vehicle controllers (see graph 12). Speeding was a factor in one of the fatalities in the Ryde LGA in 2006. The motorcyclist who was killed was going 50km's faster than the speed limit.

The map to the left identifies all the speeding related crash sites in Ryde between 2002 and 2006. There were a large number of speeding related crashes that occurred on Victoria Road, Blaxland Road and Lane Cove Road, as outlined by the clusters of bright blue dots and the red circles around them. The stars show the number of fatal crashes involving speed. Over the 2002-2006 period, two out of the six fatal crashes are on Victoria Road and another two are around the Macquarie business park area.

3cii. Crashes involving alcohol

The number for alcohol related crashes has also increased in 2006, alcohol was a factor in 20 crashes, resulting in 8 casualties in Ryde. 2006 followed a similar pattern to 2005 where, alcohol contributed to approximately 2% of the total number of fatal or injury crashes in Ryde, and the time period for when most of the casualty crashes took place, were the same. Between the hours of 9pm and 3am from Thursday to Saturday is when the highest total number of alcohol related casualties were recorded in Ryde in 2006 (see graph 10). There may be more drink driving incidences in the late evenings on weekends because of licensed premises being opened until late and an increased number of patrons at these premises. Unlike other years the 17-25 year age group were not the biggest offenders, the majority of motor vehicle controllers involved in alcohol-related crashes in Ryde in 2006 were actually aged between 40-59 (7), followed by 17-25 years and the 26-39 of age (5).

3ciii. Crashes involving fatigue



In 2006, there were 44 crashes involving fatigue in Ryde, resulting in 11 casualties, none of which were fatalities. This number has decreased drastically from 30 casualties in 2005 to 11 casualties in 2006. The majority of fatigue-related injury crashes in 2006 occurred from the beginning of the week to mid week, Monday to Friday between 3pm and 9pm (see Graph 10). The majority of motor vehicle controllers involved in fatigue-related crashes was aged between 40-59 years [see graph 11].

The map to the left identifies the driver fatigue related crashes in Ryde between 2002 and 2006. Fatigue related crash locations in Ryde and are relatively evenly spread across the LGA. However there does seem to be a large amount of crashes involving fatigue around the intersection of Victoria Road and Devlin Street, as indicated by the red circle. It must be noted that there may be discrepancies in police recordings of what constitutes a fatigue-related crash and therefore figures may not be a true and accurate recording of this factor.

4. ROAD USER TYPE

This section will now examine crash statistics and road user type.

Table 3 summarises the percentage of casualties by road user class, as a total of all casualties, between 2002 – 2006, for NSW, Sydney region and Ryde LGA. The following is representative of the 5 year average and 2006 data (5 year average data is shown).

- Ryde LGA still has a higher percentage of motor vehicle driver casualties (59.3%) compared to Sydney region (55.7%) and NSW (55%) for the 5 year average and in 2006. Although the Ryde LGA 5 year average and the 2006 total has decreased from 2005 average (where it was 58.1% for 2005 and 60.1% for the 5 year average) it is still higher than both the Sydney region and NSW.
- Ryde LGA motor vehicle passenger's for 2006 has increased from 17.9% in 2005 to 20% in 2006 which has assisted in increasing the 5 year average for Ryde LGA. The 5 year average however for Ryde LGA, 17%, is still well below the 5 year averages for the Sydney regions (20.8%) and NSW (23%).
- Motor vehicle passengers and motorcyclist for Ryde LGA are now both on the same average percent as the Sydney region (20% and 8%) but still lower than the NSW average (22% and 9%).
- The percentage of pedestrian casualties for Ryde LGA 5 year average (11.4%), which is the same as the Sydney region (11.4%), decreased from the previous year. This is higher than NSW (9%). One reason for this may be that Ryde LGA has a similar demographic pattern to Sydney, compared to NSW as a whole, with a denser population.

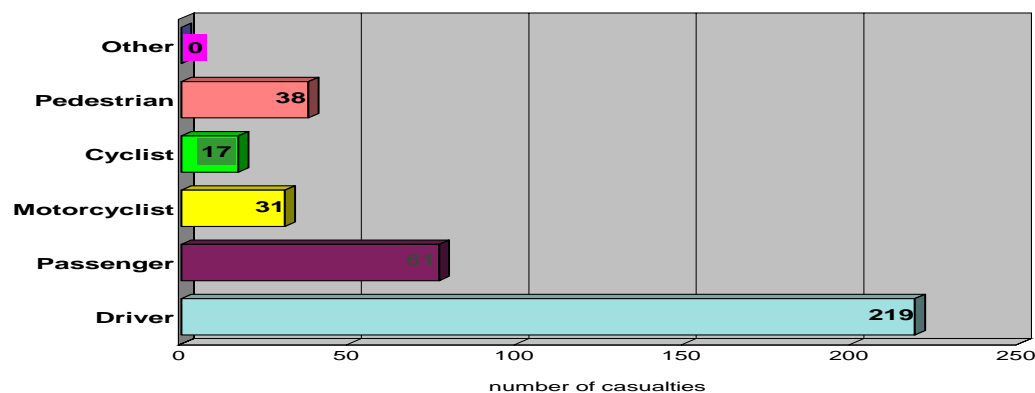
Table 3. Percentage of casualties by road user class 2002-2006 average, and 2006

	NSW		Sydney Region		Ryde LGA	
	5 yr avg	2006	5 yr avg	2006	5 yr avge	2006
Motor Vehicle Driver	55%	56%	55.7%	56%	59.3%	57%
Motor Vehicle Passenger	23%	22%	20.8%	20%	17%	20%
Motorcyclist	8%	9%	7.4%	8%	8.2%	8%
Pedal Cyclist	4%	5%	4.5%	5%	4.1%	4%
Pedestrian	9%	8%	11.4%	11%	11.4%	10%

Table 4 examines the total number of casualties by road user class from 2002 to 2006. The figures show the total number of motor vehicle drivers, motor vehicle passengers, motorcyclists and pedal cyclist casualties have all increased from 2005. The two most significant increases being the motor vehicle drivers and motor vehicle passenger casualties which have increase from 198 and 61 in 2005 to 219 and 77 in 2006. Although Motor vehicle drivers are still below the 5 year average (224), motor vehicle passenger casualties are well above the 5 year average and is the highest it has been since 2003 where there were 80 casualties. Pedestrian casualties are the only road user group which has reduced in numbers (41 in 2005 to 38 in 2006). Pedestrian casualties are the lowest it has been over the 5 year period, since its high in 2005 (48) it has declined and this trend will hopefully continue.

Table 4. Number of casualties by road user class 2002-2006 Ryde LGA

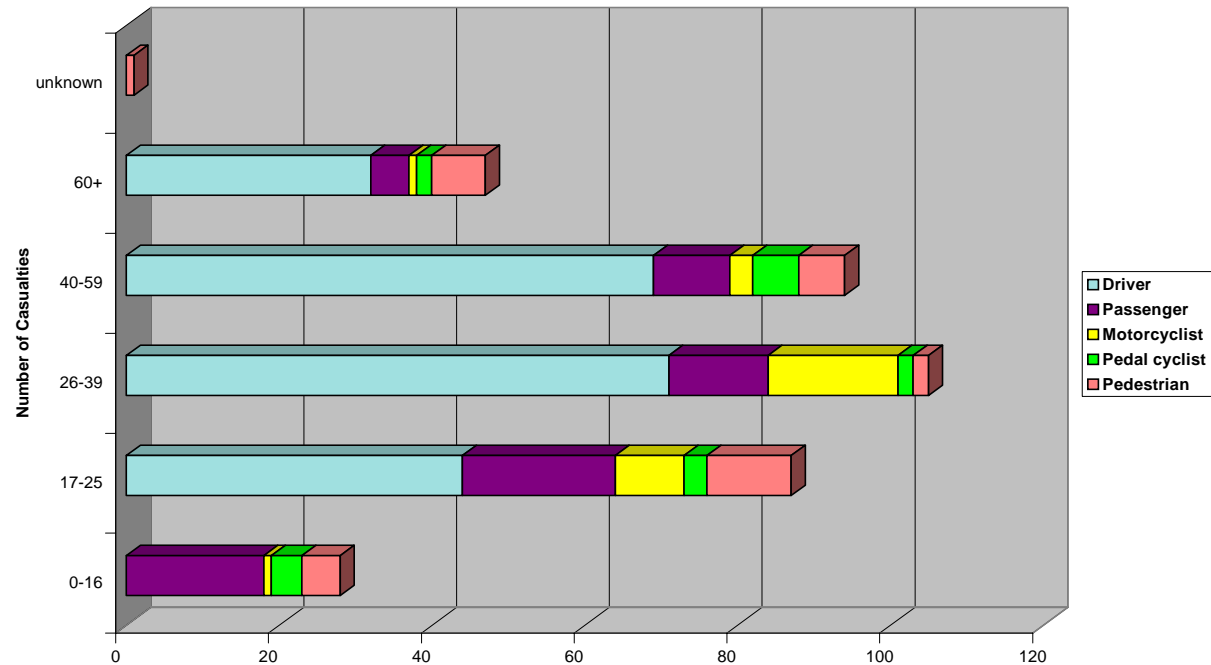
	2002	2003	2004	2005	2006	5 Yr. Average
Motor Vehicle Drivers	270	212	219	198	219	224
Motor Vehicle Passengers	63	80	40	61	77	64
Motorcyclists	28	30	38	28	31	31
Pedal Cyclists	22	12	14	13	17	16
Pedestrians	42	46	48	41	38	43



Graph 13: Casualties in Ryde LGA by road user group 2006

Table 5. 2006 Ryde casualties by age, gender and road user class

	0-16		17-25		26-39		40-59		60+		Unknown	Total
	M	F	M	F	M	F	M	F	M	F		
Motor Vehicle Drivers	-	-	25	19	40	31	33	36	12	20	3	219
Motor Vehicle Passengers	7	11	13	7	5	8	4	6	0	5	11	77
Motorcyclists	1	-	7	2	16	1	3	-	1	-	-	31
Pedal Cyclists	4	-	2	1	1	1	4	2	1	1	-	17
Pedestrians	5	-	4	7	1	1	2	4	4	3	6	38

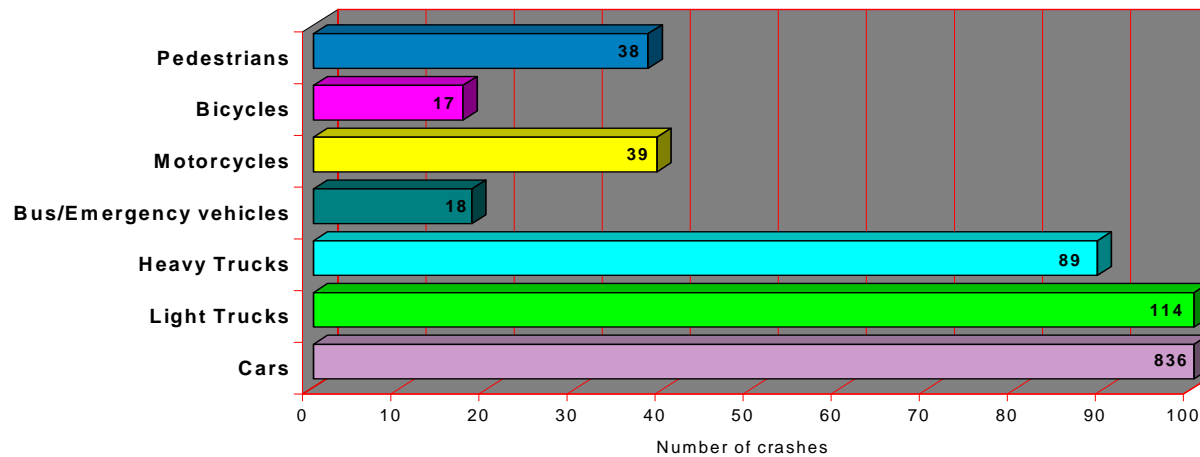


Graph 14: Casualties by road user class and age Ryde 2006

The following section addresses casualties and crashes in Ryde LGA according to age and road user class. The following has been identified from the RTA data, and graphs and tables above.

4ai. Motor Vehicle Drivers

Graph 13 shows the total number of casualties for each road user type in Ryde, 2006. Motor vehicle driver casualties' account for 57% (219 from 382) of all casualties in Ryde for 2006, whilst in 2005 motor vehicle drivers accounted for around 58% (198 from 341) of all casualties, showing a minuscule decline. The 17-25 year old age group motor vehicle controllers had the highest recorded crashes with 59, followed by the 40-59 year age group at 54. Graph 15 displays the total number of crashes in Ryde by crash type for 2006. It should be noted that the displayed accident types are not mutually exclusive and therefore should not be added together. For example an accident involving a car and a motorcycle would be included in the "car" and "motorcycle" crash type categories. From a total of 887 crashes, 836 crashes involved cars, with almost 94% of all crashes involving at least one car. This is followed by light trucks (114) and heavy trucks (89). In previous years there have been more pedestrian crashes than motor cycle crashes, this has not been the case for at least 2 years, in 2006 there were more motorcycle crashes recorded than pedestrian crashes.



Graph 15: Crash types in Ryde 2006

Table 5 shows the number of casualties in 2006 by age, gender and road user class. The table show that there were more male motor driver casualties from the age of 17 years to 59 years. According to table 5 and Graph 14, the majority of motor vehicle driver casualties were aged between 26 and 39 years of age.

4a.ii. Motor Vehicle Passengers

Since 2004, when motor vehicle passenger casualties was at its lowest 40 (11% of the total number of all casualties), motor vehicle passenger casualties has increased significantly. In 2005 motor vehicle passenger casualties as a percentage of all casualties increased to 17.9%, this percentage grew again in 2006 to 20%. As stated there were 40 passenger casualties in Ryde in 2004, and 61 in 2005, since 2004 the number of motor vehicle passenger casualties has almost doubled (77) (see table 4). The greatest number of casualties for motor vehicle passengers occurred in the 17-25 year age group in 2006, 13 males and 7 females, followed by the 0-16 age group, 7 males and 11 females. In 2005 the 60+ age group were equal in the highest number of motor vehicle passenger casualties (13), in 2006 the 60+ age group have the lowest number of casualties for motor vehicle passengers at just 5.

4a.iii. Occupant Restraints

Both motor vehicle driver and passenger casualties increased in 2006, and an important factor to consider which relates to motor vehicle drivers and passengers is occupant restraints. Table 6 shows the percentage of casualties who had restraints fitted in the vehicle but did not wear them in NSW, Sydney region and Ryde area in 2006. Ryde's percentage is lower than NSW and Sydney region, however there is still a need to address this, as seatbelts save lives and Road Safety 2010 has identified restraints as an important safety issue. It is important to promote the correct use of restraints from the beginning of a child's life, and to encourage continued restraint use from an early age, through to adulthood.

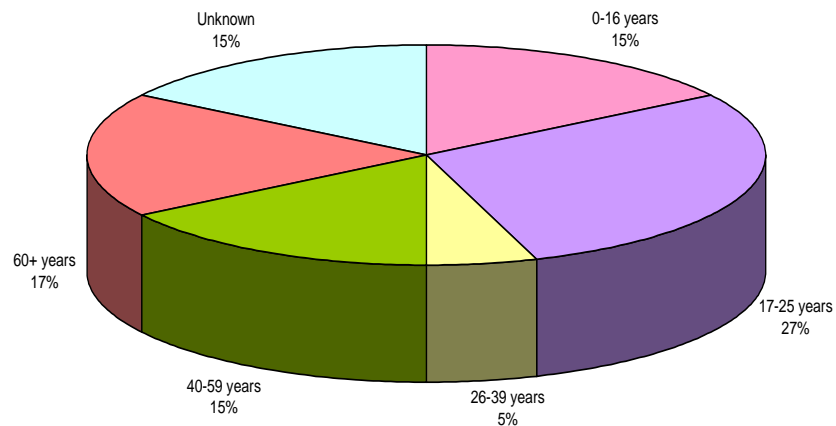
Table 6. Use of Restraints: 2006

	NSW		Sydney Region		Ryde	
All Motor Vehicle Driver Casualties						
Restraint fitted but not worn (as a % of the total number of driver casualties)	264	1.8%	114	1.3%	2	1.0%
	NSW		Sydney Region		Ryde	
All Motor Vehicle Passenger Casualties						
Restraint fitted but not worn (as a % of the total number of passenger casualties)	160	2.8%	60	1.9%	0	-

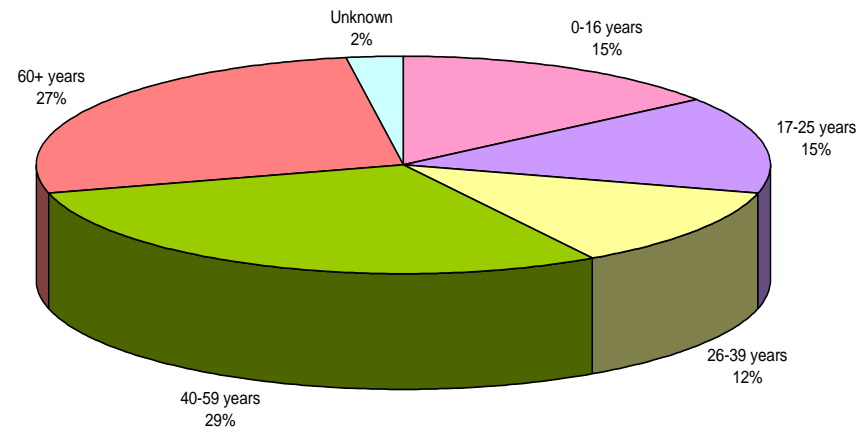
4c. Pedestrians

In 2005 the pedestrian casualties' number decreased substantially from 48 in 2004 to 41, this trend of pedestrian casualties decreasing has continued into 2006. Pedestrian casualties have continued to decrease since 2004, they are now at a 5 year low of 38 in 2006 which is well below the 5 year average of 43 (see table 4).

Graph 16 shows the percentage of pedestrian casualties in Ryde in 2006 and 2005 by age group. There have been some big changes from 2005 to 2006, as can be seen in the large increase in percentage of 17-25 year old pedestrian casualties and the large decrease in the percentage of 40-59 year old pedestrian casualties. In 2005 17-25 year old Pedestrian casualties were at a low of 15%, that number has increased by 12% to 27% of all Pedestrian casualties are in this age range now. There has also been a large change in the percentage particularly in the 40-59 year age group, in 2005 this group was the highest percentage of pedestrian casualties (29%) and has decreased in 2006 to 15%, which is equal second lowest. The 60+ age group have also decreased quite drastically from 27% in 2005 to 15% in 2006. In 2006 the 26-39 year age group was by far the lowest percentage of pedestrian casualties with only 2 pedestrians casualties recorded in this age group, which equates to 5% of all the total pedestrian casualties.



2006

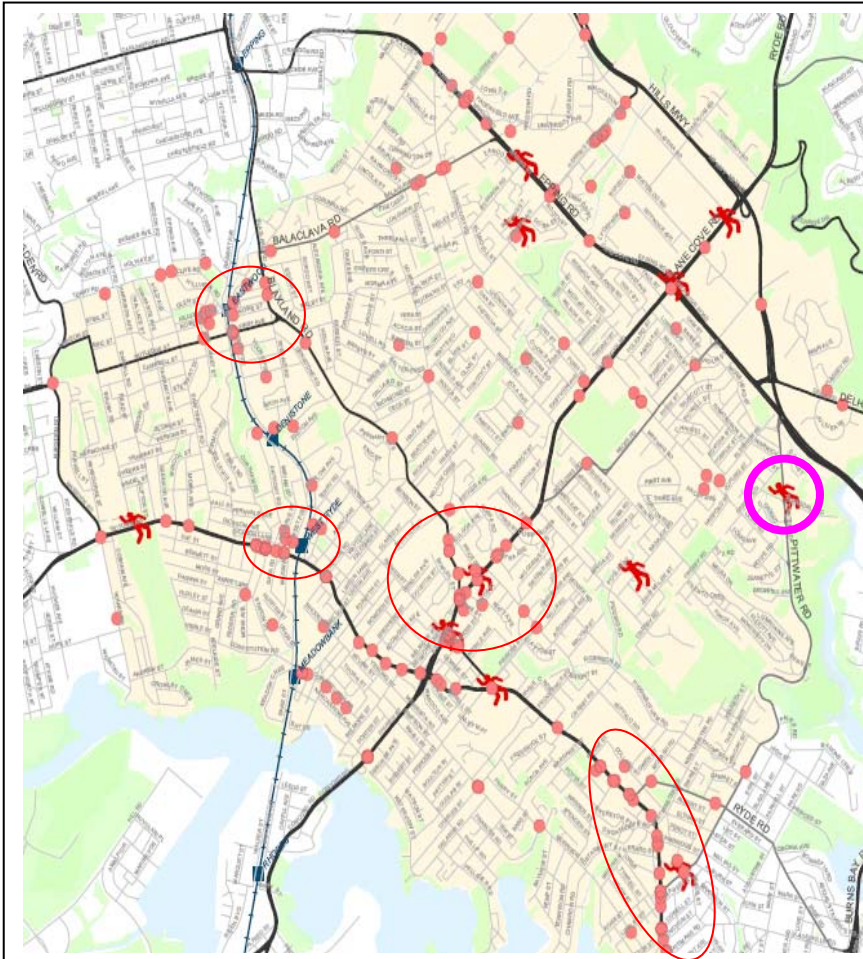


2005

Graph 16: Pedestrian casualties by age group Ryde 2006 and 2005

The number of pedestrian casualties for females and males were about the same, 16 males, 15 females and 1 unknown, although there was a small difference between the two sexes in different age groups. The highest number of pedestrian casualties for females was in the 17-25 age group (7), in that age group there were only 4 male pedestrian casualties. For males, the highest number of pedestrian casualties was in the 0-16 age group (5), whilst for females in the 0-16 age group there were no pedestrian casualties. The 26-39 and the 60+ age group were roughly the same for both females and males. These figures show in the City of Ryde greater focus needs to be placed on the younger pedestrian population.

The map below displays each pedestrian crash in Ryde between 2002 and 2006, and pedestrian crash clusters.



When looking at the map over the 5-year period there is a cluster of pedestrian crashes in Ryde, at Lane Cove Road, particularly at the intersections of Blaxland Road. It is also important to note the pedestrian crashes which have occurred at two of the railway stations in Ryde LGA, at Eastwood Station and West Ryde station. Another hot spot for pedestrian crashes is along Victoria Rd at Gladesville; this area has several schools and a strip of shops, which are used by pedestrians regularly.

In 2006 there were 39 pedestrian crashes in 2006, 37 of the crashes were injury crashes and 1 was a fatal crash. The Pedestrian fatality involved an older pedestrian, in the 70 + age group. The Pink circle shows the pedestrian fatality for 2006 which was on Pittwater Road, North Ryde. The location of the fatality did not take place in pedestrian crash cluster spot; it appears that the crash was random and unfortunate. The crash took place at 6:45pm in winter, meaning that visibility could've been a factor.

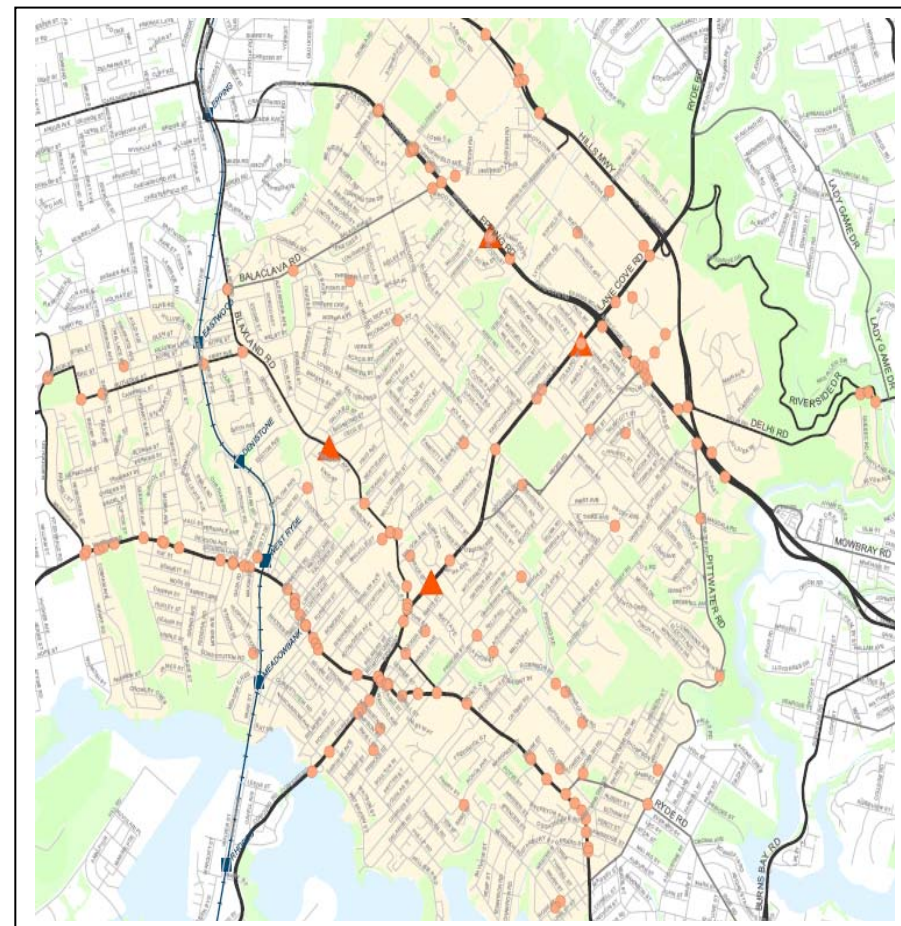
Although the pedestrian fatality was in the 60+ age group, the 17-25 age group had a higher number of Pedestrian fatalities, 11. The 60+ age group were the second highest with 7 followed closely by the 40-59 age group with 6 casualties. A possible reason for the high number of 17-25 pedestrian casualties could be that this particular age group is more likely to take risks when crossing the road, meaning that they do not necessarily wait for the pedestrian light to turn green before they cross a busy road. It could also mean that there are greater distractions such as mobile phone use or ipods.

4b. Motorcyclists

Motorcyclists accounted for 8% of all casualties in 2006, this is 0.2% lower than 2005 even though the actual number of motorcycle casualties actually increased from 28 to 31 including 1 fatality. The percentage for motorcyclist casualties decreased because the overall number of casualties increased in 2006. The number of motorcycle crashes also increased from 33 in 2005 to 39 in 2006 resulting in 31 casualties. The 26-39 year age group still dominates in the highest number of motorcyclists casualties, with 17 (16 males, 1 female) casualties being recorded, unlike 2005 where the 40-59 year age group followed in the highest number of motorcycle casualties (7), in 2006 the 17-25 year age group were the second highest in motorcycle casualties (9).

The majority of motorcycle casualties in 2006 were males. In the 0-16, 40-59 and 60+ year age groups there were no female motorcycle casualties (see table 5). The 1 motorcyclist fatality which took place in North Ryde was a 23 year old male traveling at 120km's along Lane Cove Road, the speed limit along Lane Cove Road is only 70km's; therefore speed was clearly a factor in this crash. This fatality not only fits the trend of mainly males who are motorcyclist casualties but also that younger drivers, particularly in the 17-25 age group are more likely to be involved in speed related crashes.

Epping Road, Victoria Road, Gladesville and West Ryde and Lane Cove Road are the 3 main roads that stand out as more frequent motorcycle crash locations. The intersections of Victoria Road and Devlin Street, again has a high number of motorcycle crashes and injury casualties. The map to the right displays each motorcycle crash location in Ryde from 2002-2006. Of the 31 motorcycle casualties (including the 1 fatality) in Ryde there were no known motorcyclists who were not wearing a helmet.



4c. Pedal Cyclists

Pedal cyclist casualties have also increased from 13 in 2005 to 17 in 2006 in Ryde, with no pedal cycle fatalities. The number of female pedal cycle casualties has decreased from 2005 where there were 4 in most age groups, in 2006 in all but 2 age groups there was only 1 female pedal cycle casualty (2 in the 40-59 age group and none in the 0-16 age group). Male pedal cycle casualties were higher than females in the 0-16 (4), 17-25 (2) and 40-59 (4) year age groups in Ryde in 2006. Compared to the Sydney region and NSW, Ryde Pedal cyclists are lower in the total percentage of casualties. In all three regions Pedal cyclist record the lowest number of casualties by road user class.

5. SUMMARY

In summary, there are still some issues which need to be identified and addressed in the Ryde LGA for 2006. The issues identified will in turn aid in developing road safety initiatives for the Ryde LGA over the 2008-2009 period.

- The trend for crashes was that they were on the decrease, since 2001. However from 2005 to 2006 there was a large increase in crashes (103 crashes) in Ryde. This is a concerning sign for the Ryde LGA.
- The total number of crashes (887) is now above the 5-year average (851.6). Although fatal crashes decreased substantially from 7 in 2005 to 2 in 2006. This could be an indication of cars becoming safer instead of driver becoming more aware and safe on the road environment. Supporting this statement is the high number of non-casualty crashes; out of fatal, injury and non casualty crashes, non-casualty crashes increased the most substantially, from 509 in 2005 to 573 in 2006.
- Cars were involved in both of the fatalities in the Ryde LGA. 1 was a pedestrian fatality and the other was a motorcyclist fatality.
- The number of 17-25 year olds who were motor vehicle controllers involved crashes with speed as a contributing factor is of concern. There were 42 vehicle controllers in the 17-25 year old age group who were involved in a crash with speed as a contributing factor. The next closest was the 26-29 year age group with 18 crashes involving speed.
- The most motor vehicle controller crashes and casualties occurred in the 26-39 year age group.
- In 2006 there was another increase in the number of motor vehicle passenger casualties. In 2005 there were 61 motor vehicle passenger casualties, this number had grown to 77 in 2006. A major concern is the high percentage of young motor vehicle passenger casualties, between the ages of 0-25. The 0-16 age group accounted for 18 of the 77 casualties, and the 17-25 age group accounted for 20 of the 77 casualties. As a percentage the 0-25 year old accounted for 49% of all motor vehicle passenger casualties.
- After increasing in 2005, fatigue related crashes have continued to increase but only by 1 crash (however, there may be a number of discrepancies regarding reporting of these crashes). Speeding related crashes was at its lowest in 2005 (77), however in 2006 this number increased to 85 which is now the highest it has been over the 5 year period. Alcohol related crashes also increase but only slightly, 17 in 2005 to 20 in 2006.
- Speeding is still the highest contributing factor to crashes. The majority of speeding crashes occurred during weekdays, Monday to Friday between 9am and 3pm. The majority of speeding crashes occurred in the 17-25 year age group. Almost 38% of motor vehicle controllers involved in crashes was aged between 17-25. This figure has decreased since 2004 where the percentage was as high as 49%.
- The number of alcohol related crashes has decreased since 2001. The majority of fatal or injury crashes involving alcohol occurred from Thursday to Saturday between 9pm and 3am. The majority of alcohol related crashes involved 26-39 year olds.
- The Intersection of Devlin Street and Victoria Road, Ryde appears to be a "hot spot" for crashes. Over the 2002-2006 periods there were crash clusters for speed, fatigue, pedestrians and motorcyclists.
- Road Safety in Ryde needs to mainly focus on speeding as well as pedestrian safety for young people. Mainly pedestrian distractions.

7. SOURCES

- Sydney Profile
- RTA Crash Data
- Road Safety 2010
- Maps provided by the RTA

Appendix 1

DEFINITIONS AND EXPLANATORY NOTES

Animal rider: A person sitting on/riding a horse or other animal.

Articulated truck: Comprised of articulated tanker, semi-trailer, low loader, road train and B-double.

Bicycle rider: See *Pedal cycle rider*.

Bus: Includes 'State Transit Authority' bus and long distance/tourist coach.

Car: Includes sedan, station wagon, utility (based on car design), panel van (based on car design), coupe, hatchback, fastback, sports car, taxi-cab, passenger van and four wheel drive vehicle.

Carriageway: That part of the road improved or designed and/or ordinarily used for vehicular movement. When a road has two or more of these portions, divided by a median strip or other physical separation, each of these is a separate carriageway.

Casualty: Any person killed or injured as a result of a crash.

Controller: A person occupying the controlling position of a road vehicle.

Crash: Any apparently unpremeditated event reported to the police and resulting in death, injury or property damage attributable to the movement of a road vehicle on a road.

Driver: A controller of a motor vehicle other than a motorcycle.

Emergency vehicle: Includes ambulance, fire brigade vehicle, police patrol car (or van) and tow truck.

Fatal crash: A crash for which there is at least one fatality.

Fatality: A person who dies within 30 days of a crash as a result of injuries received in that crash.

Footpath: That part of the road which is ordinarily reserved for pedestrian movement as a matter of right or custom.

Heavy truck: Comprised of heavy rigid truck and articulated truck.

Heavy rigid truck: Comprised of rigid lorry and rigid tanker with a tare weight in excess of 4.5 tonnes.

Injured: A person who is injured as a result of a crash, and who does not die as a result of those injuries within 30 days of the crash.

Injury crash: A non-fatal crash for which at least one person is injured.

Intersection crash: A crash for which the first impact occurs at or within 10 metres of an intersection.

Killed: See *Fatality*.

Light truck: Includes panel van (not based on car design), utility (not based on car design) and mobile vending vehicle.

Motor vehicle: Any road vehicle which is mechanically or electrically powered but not operated on rails.

Motorcycle: Any mechanically or electrically propelled two or three-wheeled machine with or without side-car. Includes solo motorcycle, motorcycle with sidecar, motor scooter, mini-bike, three-wheeled special mobility vehicle and moped (motorized 'pedal cycle').

Motorcycle passenger: A person on but not controlling a motorcycle.

Motorcycle rider: A person occupying the controlling position of a motorcycle.

Newcastle Metropolitan Area: Comprised of the following local government areas: Newcastle and Lake Macquarie cities.

Non-casualty crash: A crash for which at least one vehicle is towed away but there is no fatality or person injured.

Passenger: Any person, other than the controller, who is in, on, boarding, entering, alighting or falling from a road vehicle at the time of the crash, provided a portion of the person is in/on the road vehicle.

Pedal cycle: Any two or three-wheeled device operated solely by pedals and propelled by human power except toy vehicles or other pedestrian conveyances. Includes bicycles with side-car, trailer or training wheels attached.

Pedal cycle passenger: A person on but not controlling a pedal cycle.

Pedal cycle rider: A person occupying the controlling position of a pedal cycle.

Pedestrian: Any person who is not in, on, boarding, entering, alighting or falling from a road vehicle at the time of the crash.

Pedestrian conveyance: Any device, ordinarily operated on the footpath, by which a pedestrian may move, or by which a pedestrian may move another pedestrian or goods. Includes non-motorized scooter, pedal car, skateboard, roller skates, in-line skates, toy tricycle, unicycle, push cart, sled, trolley, non-motorized go-cart, bilycart, pram, wheelbarrow, handbarrow, non-motorized wheelchair or any other toy device used as a means of mobility.

Road: The area devoted to public travel within a surveyed road reserve. Includes a footpath and cycle path inside the road reserve and a median strip or traffic island.

Road vehicle: Any device (except pedestrian conveyance) upon which or by which any person or property may be transported or drawn on a road.

Sydney Metropolitan Area: Comprised of the following local government areas: City of Sydney, Bankstown, Blacktown, Botany Bay, Campbelltown, Canada Bay, Canterbury, Fairfield, Holroyd, Hurstville, Liverpool, Parramatta, Penrith, Randwick, Rockdale, Ryde, South Sydney and Willoughby cities, Ashfield, Auburn, Baulkham Hills, Burwood, Camden, Hornsby, Hunters Hill, Kogarah, Ku-ring-gai, Lane Cove, Leichhardt, Manly, Murrumbidgee, Mosman, North Sydney, Pittwater, Strathfield, Sutherland, Warringah, Waverley and Woollahra.

Wollongong Metropolitan Area: Comprised of the following local government areas: Wollongong and Shellharbour cities.

CRITERIA FOR DETERMINING SPEEDING AND FATIGUE INVOLVEMENT

Speeding

The identification of speeding (excessive speed for the prevailing conditions) as a contributing factor in road crashes cannot always be determined directly from police reports of those crashes. Certain circumstances, however, suggest the involvement of speeding. The Roads and Traffic Authority has therefore drawn up criteria for determining whether or not a crash is to be considered as having involved speeding as a contributing factor.

Speeding is considered to have been a contributing factor to a road crash if that crash involved at least one *speeding* motor vehicle.

A motor vehicle is assessed as having been *speeding* if it satisfies the conditions described below under (a) or (b) or both.

- (a) The vehicle's controller (driver or rider) was charged with a speeding offence; or
the vehicle was described by police as travelling at excessive speed; or
the stated speed of the vehicle was in excess of the speed limit.
- (b) The vehicle was performing a manoeuvre characteristic of excessive speed, that is:
 - while on a curve the vehicle jack-knifed, skidded, slid or the controller lost control; or
 - the vehicle ran off the road while negotiating a bend or turning a corner and the controller was not distracted by something or disadvantaged by drowsiness or sudden illness and was not swerving to avoid another vehicle, animal or object and the vehicle did not suffer equipment failure.

Fatigue

The identification of fatigue as a contributing factor in road crashes similarly cannot always be determined directly from police reports of those crashes and the following criteria are used to assess its involvement. Fatigue is considered to have been involved as a contributing factor to a road crash if that crash involved at least one *fatigued* motor vehicle controller.

A motor vehicle controller is assessed as having been *fatigued* if the conditions described under (c) or (d) are satisfied together or separately.

- (c) The vehicle's controller was described by police as being asleep, drowsy or fatigued.
- (d) The vehicle performed a manoeuvre which suggested loss of concentration of the controller due to fatigue, that is
 - the vehicle travelled onto the incorrect side of a straight road and was involved in a head-on collision (and was not overtaking another vehicle and no other relevant factor was identified); or
 - the vehicle ran off a straight road or off the road to the outside of a curve and the vehicle was not directly identified as travelling at excessive speed and there was no other relevant factor identified for the manoeuvre.

Roads and Traffic Authority (2004) Road Traffic Crashes in NSW – 2003 Statistical Statement